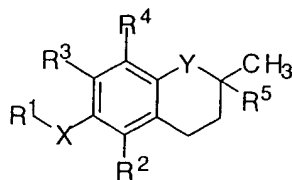


ABSTRACT OF THE DISCLOSURE

The present invention provides an antiproliferative compound having a structural formula



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where X and Y independently are oxygen, nitrogen or sulfur;
R¹ is alkyl, alkenyl, alkynyl, aryl, heteroaryl, carboxylic acid,
carboxylate, carboxamide, ester, thioamide, thiolacid, thiolester,
10 saccharide, alkoxy-linked saccharide, amine, sulfonate, sulfate,
phosphate, alcohol, ethers or nitriles; R² and R³ are hydrogen or R⁴; R⁴
is methyl, benzyl carboxylic acid, benzyl carboxylate, benzyl
carboxamide, benzylester, saccharide or amine; and R⁵ is alkenyl;
where when Y is nitrogen, said nitrogen is substituted with R⁶, wherein
15 R⁶ is hydrogen or methyl. Also provided are methods for treating a cell
proliferative disease and for inducing apoptosis in a cell comprising
administering this compound is also provided.